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CLOSE OUT DOCUMENTATION FOR REMOVAL ACTION NUMBER 15, SCRAP METAL PILES, PHASE IIB

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LETTER

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Department of Energy

Ohio Field Office
Fernald Area Office
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

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DOE-0207-97

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - 5HSF-5J
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

CLOSE OUT DOCUMENTATION FOR REMOVAL ACTION NUMBER 15, SCRAP METAL PILES, PHASE IIB

The purpose of this letter is to provide documentation to support the close out of Removal Action (RA) Number 15. The RA Number 15, Scrap Metal Piles Removal Action Work Plan (RAWP) was approved by U.S. Environmental Protection Agency (U.S. EPA) in April 1992. The RAWP described a two-phased approach: Recoverable ferrous and nonferrous metal removal (Phase I) and scrap copper removal (Phase II). A Final Report for Phase I of the RA was submitted to the U.S. EPA and Ohio Environmental Protection Agency (OEPA) in October 1994 and approved by U.S. EPA November 14, 1994.

This letter documents the status of Phase II of RA Number 15. As you are aware, the scope of work for Phase II was divided into a containerization phase (Phase IIA) and reclamation/reuse phase (Phase IIB):

PHASE IIA

Phase IIA of RA Number 15 required the containerization of the scrap copper. Containerization of the shredded copper and the copper ingots began on September 28, 1992, and was completed on October 21, 1992. Containerization of the scrap copper pile (motor windings, wire, etc.) began on January 6, 1993, and was completed on March 12, 1993. The scrap copper pile was containerized into 103 top loading boxes (20 ft x 8 ft x 8 ft) and 48 small white metal boxes (4 ft x 8 ft x 8 ft). An additional 17 white metal boxes of refuse material (wood, trash, etc.) were segregated from the scrap copper pile as the

copper materials were being loading into the 103 boxes. This secondary waste product is being managed in accordance with RA Number 9 which will continue as a programmatic RA during the remedial action for Operable Unit 3 (OU3).

Due to the presence of asbestos-containing insulation on some of the wire, there were concerns associated with containerizing the scrap copper pile. The pile was sprayed with a lockdown agent (Childers Product CP-240) prior to containerization. The CP-240 product was designed to mist, seal, and lockdown free asbestos fibers.

The containerized scrap copper has been characterized as Resource Conservation and Recovery Act (RCRA) non-hazardous solid waste (Material Evaluation Form 2549 dated 1994). The copper material has been found to contain radiological contaminants, and it is being managed as a low level radioactive waste. The table below summarizes the RA Number 15 materials containerized and currently in storage:

REMOVAL ACTION NUMBER 15 WASTE GENERATION

WASTE TYPE	VOLUME	CONTAMINANT
Copper ingots	64.5 tons	Radiological
Scrap Copper pile	1,340 tons	Radiological/Asbestos
Shredded copper	95.5 tons	Radiological/Asbestos
Refuse material	60 tons	Radiological
Total	1560 tons	

PHASE IIB

Under Phase IIB of RA Number 15, the containerized scrap copper was to be reclaimed for beneficial reuse. In late 1992, the Department of Energy (DOE) began to solicit proposals for reclamation and recycling the scrap copper. Due to numerous concerns which were identified during this procurement, it was decided that an engineering study should be performed to determine the feasibility of free releasing the Fernald Environmental Management Project (FEMP) scrap copper pile. In September 1994, the DOE initiated the development of an engineering study to determine if the scrap copper pile material could be decontaminated to below unrestricted release limits (DOE Order 5400.5) for recycling. The proposed scope of the engineering study and a Request for Proposal (RFP) were completed in May 1995. In September 1995, a contract for the study was awarded by the DOE to Material Science Corporation (MSC) of Oak Ridge, Tennessee.

The material to conduct the pilot study (2 top loaded boxes, approx. 30 tons) was shipped from the FEMP to MSC in August 1996. This study will provide a basis for reuse and recycling decisions for scrap copper (wire, windings) materials throughout the DOE Complex. Results of this study are expected in December 1996.

JUSTIFICATION OF COMPLETION

The objectives of RA Number 15 were to: 1) reduce the potential for contaminant migration to previously uncontaminated areas; 2) minimize potential for exposure to human or environmental receptors; and 3) maximize off-site beneficial reuse of the scrap metal and scrap copper. Objectives one and two were effectively met by the completion of Phase IIA, containerization of the scrap copper. The containerization of the scrap copper meets the National Oil and Hazardous Substances Pollution Contingency Plan requirement that removal actions shall, to the extent practicable, contribute to the efficient performance of any anticipated long term remedial action with respect to the release concern. Objective three will be met via the engineering study to determine the feasibility of recycling the scrap copper and incorporated into the Final Remedial Action for OU3.

The disposition of the contaminated scrap copper has been specifically included in the definition of Category H and Type 7 material in the OU3 Remediation Investigation/ Feasibility Study (RI/FS) Report and the final disposition options are consistent with the OU3 Record of Decision (ROD) for Final Remedial Action. This is in accordance with the position of the U.S. EPA (letter, James A. Saric to Jack R. Craig, May 8, 1995) and OEPA (letter, Thomas A. Schneider to Jack R. Craig, March 30, 1995).

The preferred final remedial action disposition alternatives include disposal in the proposed On-Site Disposal Facility, Off-Site Disposal, or recycling and reuse. The engineering study will provide a basis for the disposition decision. If it is determined that the scrap copper can ultimately be recycled, the goal of the third objective of RA Number 15 would be realized, however, the DOE does not believe that it is necessary for this decision to be linked to the removal action. This decision is more appropriately addressed by the Implementation of the Final Remedial Action for OU3.

In summary, the final disposition decision for the containerized scrap copper is being conducted in accordance with OU3 RI/FS Report and final OU3 ROD consistent with the position of the U.S. EPA and OEPA. In addition to being specifically listed in the OU3 RI/FS definition of Category H materials and Type 7 wastes, the scrap copper being remediated under RA Number 15 scrap copper on-site disposition option has been incorporated into the OU3 ROD. Phase IIA was completed October 21, 1992. Phase IIB will continue and should be considered separate from RA Number 15. Therefore, it is requested that RA Number 15 be considered complete.

If you should have any questions, please contact John Trygier at (513) 648-3154.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Hall

cc:

S. Fauver, EM-425/GTN
A. E. Murphy, DOE-FEMP
G. Jablonowski, USEPA-V, 5HRE-8J
R. Beaumier, TPSS/DERR, OEPA-Columbus
F. Bell, ATSDR
D. S. Ward, GeoTrans
R. Vandegrift, ODOH
S. McLellan, PRC
J. B. Bradburne, FDF/17
J. T. Curtis, FDF/8
L. C. Goidell, FDF/52-3
T. Hagen, FDF/65-2
J. Harmon, FDF/90
S. M. Houser, FDF/52-3
K. R. Kolthoff, FDF/52-3
C. Little, FDF/2
T. J. Walsh, FDF/65-2
AR Coordinator/78
EDC, FDF/52-7